

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

Applicant's or agent's file reference MJ/NLC/NLC/PAT/8104095/SGA		
Application No. SG 200100673-3	Application Filing Date (<i>day/month/year</i>) 20 March 1997	(Earliest) Priority Date (<i>day/month/year</i>) 22 March 1996
Applicant HITACHI LTD et al		

This search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I)
2. ☐ Unity of invention is lacking (See Box II)
3. ☐ The application contains disclosure of a nucleotide and/or amino acid sequence listing and the search was carried out on the basis of the sequence listing
 - ☐ filed with the application
 - ☐ furnished by the applicant separately from the application,
 - ☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in application as filed
4. With regard to the title, ☐ the text is approved as submitted by the applicant.
☒ the text has been established by this Office to read as follows:
 Semiconductor package with BGA mounting and external lead resin covered mounting.
5. With regard to the abstract, ☐ the text is approved as submitted by the applicant
☒ the text has been established by this Office as it appears in Box III
6. The figure of the drawings to be published with the abstract is Figure No. 3
 - ☐ as suggested by the applicant.
 - ☐ because the applicant failed to suggest a figure
 - ☒ because this figure better characterises the invention
 - ☐ None of the figures

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

A semiconductor package made with a multiple of devices of different functions, mounted on a mounting substrate (15). A first grouping of semiconductor devices (13) having bump electrodes are mounted on the substrate through the bumps. A second grouping of semiconductor devices (14) with a different function have external leads protruding beyond the chip edge to be connected to the mounting substrate and covered with a sealing member.

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

Application No.

SG 200100673-3

A. CLASSIFICATION OF SUBJECT MATTER

According to International Patent Classification (IPC)

Int. Cl.⁷ H01L 27/105, 23/495, 21/60

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)

DWPI and JAPIO: (H01L OR H05K) and (BUMP or BGA or BALL or CHIP or IC or C4 or COLLAPSE) and (SUBSTRATE or BOARD or PCB or PRINTED) and [(PLURALITY or MANY or MULTIPLE or SEVERAL or ARRAY) with (DEVICE or IC or PACKAGE or CHIP or INTEGRATED)] and (WIRE or LEAD or TERMINAL) and [(EXTEND or PROTRUDE or LONGER or SHORTER) with (BEYOND or OVER or OUT)]

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 107 325 A (NAKAYOSHI) 21 April 1992 See fig 6 and col 2 line 13-21.	1,8
Y	US 5 409 865 A (KARNEZOS) 25 April 1995 See abstract and fig 1a.	1,8

☐

Further documents are listed in the continuation of Box C

☒

See patent family annex

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of submission of the request to the Australian Patent Office

11 June 2002

Date of completion of the search report

23 September 2002

Date of mailing of the search report

01 OCT 2002

Name and mailing address

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Facsimile No. 61 2 62853929

Authorised officer

SUSAN T. PRING

AUSTRALIAN PATENT OFFICE**SEARCH REPORT****PATENT FAMILY MEMBERS****Application No.****SG 200100673-3**

Patent Document Cited in Search Report	Patent Family Member
US 5 107 325	JP 2-273946
US 5 409 865	NONE
END OF ANNEX	

AUSTRALIAN PATENT OFFICE

SEARCH REPORT

Applicant's or agent's file reference MJ/NLC/NLC/PAT/8104094/SGA		
Application No. SG 200100672-5	Application Filing Date (<i>day/month/year</i>) 20 March 1997	(Earliest) Priority Date (<i>day/month/year</i>) 22 March 1996
Applicant HITACHI LTD et al		

This search report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. ☐ Certain claims were found unsearchable (See Box I)
2. ☐ Unity of invention is lacking (See Box II)
3. ☐ The application contains disclosure of a **nucleotide and/or amino acid sequence listing** and the search was carried out on the basis of the sequence listing

☐ filed with the application
☐ furnished by the applicant separately from the application,
☐ but not accompanied by a statement to the effect that it did not include matter going beyond the disclosure in application as filed
4. With regard to the **title**, ☐ the text is approved as submitted by the applicant.
☒ the text has been established by this Office to read as follows:

Semiconductor device with central longitudinal opening for external leads attachment to array of chip lands.
5. With regard to the **abstract**, ☐ the text is approved as submitted by the applicant
☒ the text has been established by this Office as it appears in Box III 20.
6. The figure of the **drawings** to be published with the abstract is Figure No. 2 and 23

☐ as suggested by the applicant.
☐ because the applicant failed to suggest a figure
☒ because this figure better characterises the invention
☐ None of the figures

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

A ball grid array type semiconductor package comprising a semiconductor chip (1) formed with a series of bonding pads (7) down the longitudinal middle, two lengths of elastomer (2) bonded down either side of the centre of the chip, a flexible wiring substrate (3) bonded to the elastomer strips (2). A solder resist (4) is formed on the side of the wiring substrate (3) away from the chip (1) with openings etched therein coinciding with one end of the series of external copper leads (11) for bump (5) formation thereon. The other end of the external copper leads (11) is connected to the bonding pads (7) in the centre aisle of the chip. A gold coating (11a) exists on the external copper leads. The width of lead at the bond pad is larger than the width of the lead at the edge of the opening.

AUSTRALIAN PATENT OFFICE**SEARCH REPORT**

Application No.

SG 200100672-5

A. CLASSIFICATION OF SUBJECT MATTER

According to International Patent Classification (IPC)

Int. Cl. ⁷ H01L 21/50**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)

DWPI and JAPIO: H01L and keywords:

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Patent Abstracts of Japan, JP 07-321244 A (MATSUSHITA ELECTRIC INDUSTRIES CO LTD) 8 December 1995	
A	US 5 448 114 A (KONDOH et al) 5 September 1995	
A	US 5 398 863 A (GRUBE et al) 21 March 1995	
E,A	US 5 686 757 A (URUSHIMA) 11 November 1997	
E,A	US 5 706 174 A (DISTEFANO et al) 6 January 1998	



Further documents are listed in the continuation of Box C



See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of submission of the request to the Australian Patent Office

17 June 2002

Date of completion of the search report

13 September 2002

Date of mailing of the search report

20 SEP 2002

Name and mailing address

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SUSAN T. PRING

AUSTRALIAN PATENT OFFICE**SEARCH REPORT****PATENT FAMILY MEMBERS****Application No.****SG 200100672-5**

Patent Document Cited in Search Report	Patent Family Member		
JP 07-321244	NONE		
US 5 448 114	NONE		
US 5 398 863	AU 73697/94	WO 95/03152	JP 08-501908
US 5 686 757	DE 69419127	JP 07-201925	
US 5 706 174	NONE		END OF ANNEX



Austrian Patent Office
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24. Mai 2002

Applicant
HITACHI LTD. et al.

Application No.
9904140-2

Filing Date
20 March 1997 (20.03.1997)

(Earliest) Priority Date
22 March 1996 (22.03.1996)

International Patent Classification (IPC')

H01L 23/498

Please find enclosed the

- ☒ **SEARCH REPORT**
- ☐ **EXAMINATION REPORT**
- ☐ **WRITTEN OPINION**

provided by the Austrian Patent Office as Search and Examination Authority according to the Memorandum of Understanding between the Government of Singapore and the Austrian Patent Office (MOU)

Best regards

AUSTRIAN PATENT OFFICE
Service and Information
Sector TRF

P. NEGWER

Telephone No.: ++431/53424/180

Enclosures:

- ☒ the search report
(it is also accompanied by a copy of each prior art document cited in the report)
- ☐ the examination report
- ☐ the written opinion
- ☐ the Registry's copy of the priority application



Austrian Patent Office

Application No. 9904140-2	Applicant: HITACHI LTD. et al.
Filing date 20 March 1997 (20.03.1997)	(Earliest) Priority Date 22 March 1996 (22.03.1996)

GENERAL OBSERVATIONS

☒ With regard to the abstract the text is approved as submitted by the applicant.

☒ The application contains neither statements disparaging any person nor expressions etc. contrary to morality or the public order.

☒ Unity of invention is lacking.

There are multiple inventions in this application:

a) claims 1-5 and 36

b) claims 6-8

c) claims 9-23

d) claims 24-27

e) claims 28-35

} all concerning semiconductor devices, defined, however, by different technical teachings

This search is therefore restricted to the invention first mentioned in the claims; it is covered by claims Nos. 1-5 and 36.

The Searching Authority can only establish the search report on the other parts of the application if a request for a supplementary search report is transmitted.

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Authorized Officer

Kutzelnigg

Telephone No. ++43 1/53424/ 0



SEARCH REPORT

Application No.
9904140-2

A. CLASSIFICATION OF SUBJECT MATTER

According to the International Patent Classification (IPC⁷):

H01L 23/498

B. FIELDS SEARCHED IPC⁷:

H01L 23/498, 23/495, 23/50, 21/60

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)

WPI, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0701278 A2 (SHINKO ELECTRIC CO. LTD.) 13 March 1996 (13.03.96) <i>fig. 4 and corresponding text.</i>	1,2,4,36

A	US 5398863 A (GRUBE et al.) 21 March 1995 (21.03.95) <i>figs. 1,5 and corresponding text.</i>	1,36

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of actual completion of the search: 18 March 2002 (18.03.2002)

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Austrian Patent Office

Application No. 9904140-2	Applicant HITACHI LTD. et al.
Filing date 20 March 1997 (20.03.1997)	(Earliest) Priority Date 22 March 1996 (22.03.1996)

SEARCH REPORT

EXPLANATIONS

EP 0701278 A2:

Semiconductor device comprising a package substrate having a surface defining a chip mount area and a peripheral area thereof; a semiconductor chip mounted on said chip mount area of the package substrate; an electrically insulating elastic layer provided on said peripheral area of the package substrate, said layer having an outside surface opposite to said package substrate; a wiring pattern film provided on said outside surface of the elastic layer, said wiring pattern film including a base insulation film and wiring patterns formed on said base insulation film, each of said wiring patterns having one end connected with an external connection terminal and the other end connected with said semiconductor chip; and a resin sealing means for sealing said semiconductor chip. In the embodiment of fig. 4 a wiring pattern film having no device hole is used. Concerning each wiring pattern of the wiring pattern film of this embodiment, one end can be connected to the external connection terminal, and the other end is connected to the connections portions, i.e., the connection bumps, of the semiconductor chip.

US 5398863 A:

Method of making connections to a semiconductor chip assembly and the chip itself. The method includes the step of juxtaposing a connection component with the part so that a support structure in the connection component overlies a contact-bearing front surface of the part and so that elongated connection sections of leads on the connection component extend from the support structure above the contacts. Thus, the leads may protrude outwardly beyond the outermost edge of the support structure, or else may extend across gaps or holes in the support structure, so that the leads are disposed above the contacts on the part.



SEARCH REPORT

Information on patent family members

Applicant No.

9904140-2

This annex lists the patent family members relating to the patent documents cited in the search report.
The members are as contained in the EPIDOS INPADOC file.
The Office is in no way liable for these particulars which are merely given for the purpose of information

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
EP	A2	701278	13-03-1996	JP	A2	8078574	22-03-1996
EP	A3	701278	26-03-1997	US	A	5602059	11-02-1997
US	A	5398863	21-03-1995	AU	A1	73697/94	20-02-1995
				JP	T2	8501908	27-02-1996
				WO	A1	9503152	02-02-1995



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SINGAPORE 0718

Date of mailing:

24. Mai 2002

Applicant
HITACHI LTD. et al.

Application No.
9904145-1

Filing Date
20 March 1997 (20.03.1997)

(Earliest) Priority Date
22 March 1996 (22.03.1996)

International Patent Classification (IPC')

H01L 23/498

Please find enclosed the

- ☒ SEARCH REPORT
☐ EXAMINATION REPORT
☐ WRITTEN OPINION

provided by the Austrian Patent Office as Search and Examination Authority according to the Memorandum of Understanding between the Government of Singapore and the Austrian Patent Office (MOU)

Best regards

AUSTRIAN PATENT OFFICE
Service and Information
Sector TRF

P. NEGWER

Telephone No.: ++431/53424/180

Enclosures:

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(it is also accompanied by a copy of each prior art document cited in the report)
☐ the examination report
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☐ the Registry's copy of the priority application



Austrian Patent Office

Application No. 9904145-1	Applicant: HITACHI LTD. et al.
Filing date 20 March 1997 (20.03.1997)	(Earliest) Priority Date 22 March 1996 (22.03.1996)

GENERAL OBSERVATIONS

☒ With regard to the abstract the text is approved as submitted by the applicant.

☒ The application contains neither statements disparaging any person nor expressions etc. contrary to morality or the public order.

☒ Unity of invention is lacking.

There are multiple inventions in this application

- a) claims 1-5,
- b) claims 6-13,
- c) claims 14-25, 27-32 and 34-40
- d) claim 26,
- e) claim 33

} all concerning semiconductor devices, defined, however, by different technical teachings

This search is therefore restricted to the invention first mentioned in the claims; it is covered by claims Nos. 1-5.

The Searching Authority can only establish the search report on the other parts of the application if a request for a supplementary search report is transmitted.

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Facsimile No. ++431/53424/535

Authorized Officer

Kutzelnigg

Telephone No. ++431/53424/ 0



SEARCH REPORT

Application No.
9904145-1

A. CLASSIFICATION OF SUBJECT MATTER

According to the International Patent Classification (IPC⁷):

H01L 23/498

B. FIELDS SEARCHED IPC⁷:

H01L 23/498, 23/495, 23/50, 21/60

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)
WPI, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0701278 A2 (SHINKO ELECTRIC INDUSTRIES CO. LTD.) 13 March 1996 (13.03.96) <i>fig. 4 and corresponding text.</i>	1
A	US 5398863 A (GRUBE et al.) 21 March 1995 (21.03.95) <i>figs. 1-5 and corresponding text.</i>	1

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

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"&" document member of the same patent family

Date of actual completion of the search: 20 March 2002 (20.03.2002)

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Authorized Officer Kutzelnigg

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Austrian Patent Office

Application No. 9904145-1	Applicant HITACHI LTD. et al.
Filing date 20 March 1997 (20.03.1997)	(Earliest) Priority Date 22 March 1996 (22.03.1996)

SEARCH REPORT

EXPLANATIONS

EP 0701278 A2:

Semiconductor device comprising a package substrate having a surface defining a chip mount area and a peripheral area thereof; a semiconductor chip mounted on said chip mount area of the package substrate; an electrically insulating elastic layer provided on said peripheral area of the package substrate, said layer having an outside surface opposite to said package substrate; a wiring pattern film provided on said outside surface of the elastic layer, said wiring pattern film including a base insulation film and wiring patterns formed on said base insulation film, each of said wiring patterns having one end connected with an external connection terminal and the other end connected with said semiconductor chip; and a resin sealing means for sealing said semiconductor chip. In the embodiment of fig. 4 a wiring pattern film having no device hole is used. Concerning each wiring pattern of the wiring pattern film of this embodiment, one end can be connected to the external connection terminal and the other end is connected to the connecting portions, i.e., the connection bumps, of the semiconductor chip.

US 5398863 A:

Method of making connections to a semiconductor chip assembly and the chip itself. The method includes the step of juxtaposing a connection component with the part so that a support structure in the connection component overlies a contact-bearing front surface of the part and so that elongated connection sections of leads on the connection component extend from the support structure above the contacts. Thus, the leads may protrude outwardly beyond the outermost edge of the support structure, or else may extend across gaps or holes in the support structure, so that the leads are disposed above the contacts on the part.



SEARCH REPORT

Information on patent family members

Application No.

9904145-1

This annex lists the patent family members relating to the patent documents cited in the search report.
The members are as contained in the EPIDOS INPADOC file.
The Office is in no way liable for these particulars which are merely given for the purpose of information

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP A2 701278	13-03-1996	JP A2 8078574	22-03-1996
EP A3 701278	26-03-1997	US A 5602059	11-02-1997
US A 5398863	21-03-1995	AU A1 73697/94	20-02-1995
		JP T2 8501908	27-02-1996
		WO A1 9503152	02-02-1995



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Date of mailing: 16:33

15. Mai 2002

Applicant
HITACHI LTD. et al.

Application No.
9904146-9

Filing Date
20 March 1997 (20.03.1997)

(Earliest) Priority Date
22 March 1996 (22.03.1996)

International Patent Classification (IPC')

H 01 L 21/60

Please find enclosed the

- ☒ **SEARCH REPORT**
- ☐ **EXAMINATION REPORT**
- ☐ **WRITTEN OPINION**

provided by the Austrian Patent Office as Search and Examination Authority according to the Memorandum of Understanding between the Government of Singapore and the Austrian Patent Office (MOU)

Best regards

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Sector TRF

P. NEGWER

Telephone No.: ++431/53424/180

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- ☐ the examination report
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Austrian Patent Office

Application No. 9904146-9	Applicant: HITACHI LTD. et al.
Filing date 20 March 1997 (20.03.1997)	(Earliest) Priority Date 22 March 1996 (22.03.1996)

GENERAL OBSERVATIONS

☒ With regard to the abstract the text is approved as submitted by the applicant.

☒ The application contains neither statements disparaging any person nor expressions etc. contrary to morality or the public order.

☒ Unity of invention is lacking.

There are multiple inventions in this application: Two groups: group a) claims 1,2,7-9 and group b) claims 3-6. Both groups concern methods of manufacturing a semiconductor device, defined, however, by different technical teachings.

This search is therefore restricted to the invention first mentioned in the claims; it is covered by claim(s) no(s) 1,2,7-9.

The Searching Authority can only establish the search report on the other parts of the application if a request for a supplementary search report is transmitted.

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Authorized Officer

Kutzelnigg

Telephone No. ++431/53424/ 0



SEARCH REPORT

Application No.
9904146-9

A. CLASSIFICATION OF SUBJECT MATTER

According to the International Patent Classification (IPC⁷):

H 01 L 21/60

B. FIELDS SEARCHED IPC⁷:

H 01 L 21/60, 23/495, 23/498, 23/50

Electronic data base consulted during the search (name of data base and, where practicable, search terms used)

WPI, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0701278 A2 (SHINKO ELECTRIC INDUSTRIES CO.) 13 March 1996 <i>fig. 4 and corresponding text.</i>	1,7
	--	
A	US 5398863 A (GRUBE et al.) 21 March 1995 (21.03.95) , <i>fig. 1-5 and corresponding text.</i>	1,7

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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"&" document member of the same patent family

Date of actual completion of the search: 22 March 2002 (22.03.2002)

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Authorized Officer Kutzelnigg

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Austrian Patent Office

Application No. 9904146-9	Applicant HITACHI LTD. et al.
Filing date 20 March 1997 (20.03.1997)	(Earliest) Priority Date 22 March 1996 (22.03.1996)

SEARCH REPORT

EXPLANATIONS

EP 0701278 A2: Semiconductor device comprising a package substrate having a surface defining a chip mount area and a peripheral area thereof; a semiconductor chip mounted on said chip mount area of the package substrate; an electrically insulating elastic layer provided on said peripheral area of the package substrate, said layer having an outside surface opposite to said package substrate; a wiring pattern film provided on said outside surface of the elastic layer, said wiring pattern film including a base insulation film and wiring patterns formed on said base insulation film, each of said wiring patterns having one end connected with an external connection terminal and the other end connected with said semiconductor chip; and a resin sealing means for sealing said semiconductor chip. In the embodiment of fig. 4 a wiring pattern film having no device hole is used. Concerning each wiring pattern of the wiring pattern film of this embodiment, one end can be connected to the external connection terminal, and the other end is connected to the connecting portions, i.e., the connection bumps, of the semiconductor chip.

US 5398863 A: Method of making connections to a semiconductor chip assembly and the chip itself. The method includes the step of juxtaposing a connection component with the part so that a support structure in the connection component overlies a contact-bearing front surface of the part and so that elongated connection sections of leads on the connection component extend from the support structure above the contacts. Thus, the leads may protrude outwardly beyond the outermost edge of the support structure, or else may extend across gaps or holes in the support structure, so that the leads are disposed above the contacts on the part.



SEARCH REPORT

Information on patent family members

Application No.

9904146-9

This annex lists the patent family members relating to the patent documents cited in the search report.
The members are as contained in the EPIDOS INPADOC file.
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP A2 701278	13-03-1996	JP A2 8078574	22-03-1996
EP A3 701278	26-03-1997	US A 5602059	11-02-1997
US A 5398863	21-03-1995	AU A1 73697/94	20-02-1995
		JP T2 8501908	27-02-1996
		WO A1 9503152	02-02-1995